

WHAT IS CLAIMED IS:

1. A carrier structure for a turboprop, the turboprop having a front portion comprising a fan, a central portion, and a rear portion, and being designed to be
5 mounted in a longitudinal direction beneath and/or in front of an airplane wing, said wing having a framework, the carrier structure comprising:

• a downwardly-open top portion for securely mounting to the framework of said wing and comprising a
10 front arch from which said front portion of the turboprop is to be suspended, a rear arch, and longitudinal beams disposed at least between said front arch and said rear arch and suitable for extending as far as the framework of said wing, said longitudinal beams interconnecting
15 said front arch and said rear arch and being designed to be secured to the framework of said wing;

• a removable, upwardly-open bottom portion having at least two bottom arches together with longerons extending in the longitudinal direction and
20 interconnecting said bottom arches;

said bottom portion being demountably secured to the top portion by centering and fixing means, said bottom and top portions together defining a housing suitable for receiving said turboprop; and
25 • a suspension for carrying said turboprop.

2. A carrier structure according to claim 1, wherein said front arch and said rear arch of the top portion are each extended in a vertical plane by a respective one of the
30 bottom arches.

3. A carrier structure according to claim 1, wherein said top portion further comprises at least one intermediate arch mounted on said longitudinal beams between said
35 front arch and said rear arch.

4. A carrier structure according to claim 1, wherein said top portion further comprises a top cowling assembly disposed on the outside going from said framework of said wing at least as far as said front arch, while leaving an opening for placing longitudinally in line with the fan of the turboprop.
5. A carrier structure according to claim 4, wherein said top cowling assembly includes at least one hinged cover capable of being opened to give access to said housing containing said turboprop.
- 10 6. A carrier structure according to claim 1, wherein said bottom portion further comprises a bottom cowling assembly disposed on the outside going from said framework of said wing at least as far as said front arch, leaving an opening for placing longitudinally in line with the fan of the turboprop.
- 15 20 7. A carrier structure according to claim 1, wherein said centering and fixing means comprise at least four centering and fixing assemblies disposed in a plane separating said top and bottom portions, each centering and fixing assembly comprising at least one centering pin and a corresponding hole, together with a locking device.
- 25 30 8. A carrier structure according to claim 7, wherein said locking device comprises at least one screw co-operating with a corresponding thread and/or bore.
- 35 9. A carrier structure according to claim 1, wherein said suspension comprises a front suspension mounted on said front arch of the top portion.
10. A carrier structure according to claim 9, wherein said front suspension comprises at least two fixing areas disposed symmetrically on said front arch of the top

portion and connected to said front portion of the turboprop via respective tabs.

11. A carrier structure according to claim 1, wherein
5 said suspension comprises a front suspension mounted on
the bottom portion.

12. A carrier structure according to claim 1, wherein
said suspension further comprises, on the longitudinal
10 beams of the top portion, a rear suspension for flexibly
retaining the rear portion of the turboprop.

13. A carrier structure according to claim 12, wherein
said rear suspension comprises two assemblies disposed
15 symmetrically and transversely to the longitudinal
direction, each assembly comprising first and second
links together with an upright interconnecting at least
two longitudinal beams of the top portion, the first and
second links each having an outside end, and an inside
20 end, said inside end of the first link and said inside
end of the second link being mounted on the rear portion
of the turboprop one above the other, and said outside
ends of the first and second links being connected to
said upright.

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14. A carrier structure according to claim 12, wherein
said rear suspension comprises two assemblies disposed
symmetrically and transversely to the longitudinal
direction, each assembly comprising first and second
30 links and a pivot support connected to a longitudinal
beam of the top portion, the first and second links each
having an outside end and an inside end, said inside end
of the first link and said inside end of the second link
being mounted on the rear portion of the turboprop one
35 above the other, and said outside ends of the first and
second links being connected to at least one of the
longitudinal beams of the top portion.

15. An assembly comprising a structure according to claim 1, an airplane wing to which said structure is fixed, and a turboprop disposed in said housing.